

DIRECTOR'S REPORT AND RECOMMENDATION

Biotech Related Amendments

INTRODUCTION

South Lake Union (SLU) is a “Center City” neighborhood, one of the neighborhoods adjacent to downtown, that is also ideally situated between downtown and the University of Washington. Much attention has been paid to the neighborhood as a future center for the biotechnology or “biotech” industry. The Mayor’s strategy for South Lake Union is for the area to become a hub for biotech use. A number of City initiatives ranging from investing in transportation and other infrastructure to programmatic and regulatory reforms are underway to help promote job creation in the biotech industry for the future economic health of the city and the South Lake Union neighborhood.

The South Lake Union area has historically been a light manufacturing and commercial area serving other commercial uses in the region, particularly downtown. The importance of biotech uses is recognized in the current neighborhood plan, South Lake Union 2014, adopted in 1997, as are other commercial and residential uses. This eclectic mix of uses is one of the main characteristics of the South Lake Union neighborhood. Since the early 1980’s, biotech uses have been a growing presence in the neighborhood. Local enterprises such as the Fred Hutchinson Cancer Research Center and ZymoGenetics have established a strong presence in the neighborhood and provide a foundation for a strong medical research and development hub.

Industrial Commercial (IC) zoning was created in the mid-80s and applied in the South Lake Union area to attract research and development uses, in particular biotech and software development businesses. These uses are best located in areas where light manufacturing, research and development laboratories and office use can be co-located within one neighborhood or in the same building. IC zoning applies to much of the middle third of the South Lake Union Neighborhood. The zoning that makes up the remainder of the neighborhood, Commercial (C), Neighborhood Commercial (NC) and Seattle Cascade Mixed (SCM) zones, all allow biotech use in some capacity.

Over the past fifteen years several buildings have been converted or constructed for biotech research and development. Study of these buildings provides useful information about the proposed adjustments to the zoning in South Lake Union. These adjustments effectively would update the zoning, to meet the unique characteristics of modern biotech uses that have evolved since the zoning to encourage such use was first conceived.

This report reexamines how Seattle’s zoning addresses biomedical uses and how zoning can help stimulate a neighborhood that is poised to flourish as a center for biomedical research and development. Further consideration is anticipated in future efforts to augment biomedical and other commercial development in the area with a vital mix of residential and support services in proximity to the enhanced infrastructure planned. This report concludes with proposed zoning amendments to implement the Mayor’s vision for the South Lake Union neighborhood.

BACKGROUND

The topography of the South Lake Union neighborhood is a basin sloping to the lake from downtown. The land is highest around the perimeters of the neighborhood and lowest at the center of the neighborhood generally at Westlake and Terry Avenues and down to the shore of Lake Union. The boundaries of the neighborhood are roughly I-5 on the east, Denny Way on the south, Aurora Avenue on the west and the shoreline of Lake Union to the north. The neighborhood consists of a mixture of building types and uses. The diversity of uses ranges from residential to industrial and includes uses such as maritime, retail, artisan, biotechnical and social services. The neighborhood has served as a commercial and light industrial support area to the city since the 1880's. Over the last decade, South Lake Union's attractiveness as a location for high tech and biotech research and development uses has become more and more apparent. New development tends to be larger than existing uses in the neighborhood, lending a variation in the scale of development throughout the neighborhood as new development replaces existing older buildings.

Existing Zoning

A neighborhood's character generally reflects its historical evolution and the zoning is intended to indicate as much as is possible, the relative scale and intensity of activity that is both present and desired as the neighborhood continues to develop. Zoning in South Lake Union consists of Neighborhood Commercial 3 (NC3), Commercial 1 and 2 (C1 and 2), Industrial Commercial (IC) and Seattle Cascade Mixed (SCM) zones.

See the maps at the end of the report for the location of the zones and height limits.

Commercial Zones (NC3, C1 and C2). These areas generally provide locations for a range of development types including: single purpose commercial structures, multi-story mixed-use development with commercial uses along the street front and multi-story residential structures. The general characteristics of the three zone designations are described in more detail below:

- Neighborhood Commercial 3 (NC3) is a pedestrian-oriented shopping district serving the surrounding neighborhood and a larger community or citywide clientele. The area provides for comparison shopping with a wide range of retail goods and services. The area also provides offices and business support services that are compatible with the retail character of the area and may also include residences.
- Commercial 1 (C1) is an auto-oriented, primarily retail/service commercial area that serves surrounding neighborhoods and the larger community or citywide clientele. The area provides a wide range of commercial services, including retail, offices and business support services, and may also provide for residential uses at limited densities.
- Commercial 2 (C2) is an auto-oriented, primarily non-retail commercial area that provides a wide range of commercial activities serving a citywide function. These areas provide employment opportunities, business support services and

locations for light manufacturing and warehouse uses, and may also provide for residential uses at limited densities.

Height limits are applied independently of zoning in the South Lake Union neighborhood. This allows tailoring development intensity to the character of different areas. Height limits in the area range from 40 feet near Lake Union to 65 feet and 85 feet in the remainder of the neighborhood, rising to 125 feet by Denny Way. A number of different factors are considered when designating the height limit in a specific location, including:

- The character of the surrounding area: higher height districts are appropriate next to Downtown Seattle.
- Topographical conditions and views: height limits are intended to reinforce the natural topography of the area and are set to reduce the potential of view blockage.

Industrial Commercial Zone. The IC zone was created to promote development of businesses, particularly new technology oriented uses. These businesses incorporate a mix of industrial and commercial activities including manufacturing and research and development, while accommodating a wide range of other employment activities. The development standards are intended to create an environment that is attractive to business and recognizes the economic constraints that face new development.

Seattle Cascade Mixed Zone. The intent of the SCM zone is to encourage a mixed use neighborhood while encouraging residential development in mixed-use structures with an active pedestrian-oriented street front.

Applicable Comprehensive Plan Goals and Policies

Seattle's Comprehensive Plan outlines general goals and policies for various land use areas as well as guidelines for economic development. According to the plan, "Goals represent the results that the City hopes to realize over time, perhaps within the twenty-year life of the plan... Whether expressed in terms of numbers or only as directions for future change, goals are not guarantees or mandates." The plan also states, "Policies should be read as if preceded by the words 'it is the City's general policy to'..." The proposed Land Use Code amendments are consistent with the goals and policies of the City's Comprehensive Plan. A few of the applicable goals/policies are presented here:

Goals for Mixed-Use Commercial Areas:

- Provide for a diversity of uses that contribute to the city's total employment base and provide the services needed by the city's residents and businesses.
- Encourage business creation, expansion and vitality, while maintaining compatibility with the neighborhood-serving character of business districts, and the character of surrounding areas.

- Provide locations for accommodating a wide range of character and function that serve the employment, service, retail and housing needs of Seattle's existing and future population.

Goals for Industrial Areas:

- Accommodate the expansion of existing businesses and stabilize existing industrial areas. Promote opportunities for new businesses that are supportive of the goals for industrial areas.
- Consider manufacturing uses, advanced technology industries and a wide range of industrial-related commercial functions, such as warehouse and distribution activities appropriate for industrial areas.

Goals for Economic Development:

- Seek ways to create a local business environment that promotes the establishment, retention, and expansion of high-technology industries in the city. Where possible, look for opportunities to link these businesses to existing research institutions, hospitals, educational institutions and other technology businesses.
- Pursue opportunities for growth and strategic development, where appropriate, in urban centers and hub urban villages, which are planned for the greatest concentrations of jobs and job growth outside of downtown.

South Lake Union Neighborhood Plan

The South Lake Union Neighborhood Plan was recognized by the City Council in 1997; a number of goals and policies were adopted into the Comprehensive Plan. Those goals and policies focused on three areas: neighborhood character, parks and open space, and transportation. The proposed code amendments help promote biotech use as one of the varied uses present in this mixed use neighborhood. The proposal is consistent with the goals and policies that apply in the neighborhood, which can be summarized by policy SLU-G1, which describes the neighborhood as "a mixed use neighborhood with an emphasis on small business and light industry."

Updated Growth Figures -- Housing and Job Growth

Employment growth in the South Lake Union neighborhood has been higher than the growth goals in the City's Comprehensive Plan and used by the South Lake Union neighborhood planners in preparing their neighborhood plan. Property owners and others have reported that the capacity of the existing zoning and the nature of the real estate market will likely lead to more growth in the neighborhood than currently acknowledged.

For planning purposes, the City contracted the services of a real estate market analyst to examine the likely growth that can be accommodated in the neighborhood and compare this to other forecasts, prepared separately by the City of Seattle and the Puget Sound Regional Council. The real estate consultant, Heartland, prepared an analysis that concluded that the neighborhood could reasonably accommodate growth that is closer to the capacity of the existing zoning than the other forecasts indicated. The Heartland forecast indicates that approximately 10,000 housing units and 20,000 jobs can be

accommodated in the neighborhood from now until 2020. From a real estate market perspective, this capacity is also thought to be a forecast of what is likely to occur in the long-term planning period.

Biotech Development

Of the overall growth forecast, biotech development is estimated to make up approximately 35 percent of the overall employment growth forecasted. The biotech share of the overall growth is approximately 8,000 biotech jobs, which translates into about 4 million square feet of building space.

Over the past ten years a number of buildings have been converted or constructed for biotechnology or “biotech” research and development use. Study of these buildings shows that adjustments to the zoning in South Lake Union are needed because of the unique needs or features of biotech uses. These features include tall floor to floor heights and specialized mechanical equipment.

Housing

Legislation accompanying this report addresses the zoning issues that pose problems or challenges for biotech development. The South Lake Union Neighborhood is characterized by a mix of uses, including residential use. The existing zoning, with the exception of the Industrial Commercial zone, allows residential use, although in some cases subject to special consideration in the form of an administrative conditional use review.

DCLU is interested in examining issues about how housing can continue to be a part of the mix in a mixed use, commercial neighborhood. South Lake Union is such a mixed use neighborhood with a strong commercial presence. To help fulfill jobs/housing balance goals, it will be important to encourage a variety of housing types, while adding to the housing supply, which is key to a successful strategy for urban centers and villages.

The following are examples of regulatory considerations, for future community discussion:

- Examine how residential use is permitted in commercial zones, for example, permitted outright vs. conditional use.
- Examine the appropriateness of development standards that only apply for residential use in mixed use and single purpose residential structures. This includes upper-level lot coverage limits.
- Review the Industrial Commercial (IC) zoned area, where residential use is currently not allowed.
- Examine height limit changes to help encourage housing development.
- Explore the use of incentive zoning provisions, such as transfer of development rights (TDR) and Bonus programs.

ANALYSIS

As a center city urban village, strategically located between Downtown and the University of Washington, South Lake Union is acknowledged as an ideal place for biotech development. In order to help ensure that the promise of biotech development is realized, DCLU is proposing amendments to the Land Use Code as follows:

1. Allow additional height and revise the method by which height is measured;
2. Revise density limits to acknowledge mechanical equipment and ventilation needs within buildings;
3. Modify and allow flexibility in locating rooftop mechanical equipment;
4. Modify the amount of parking required for research and development use; and
5. Revise the definition for research and development uses.

Maximum Building Height

A distinguishing feature of biotech use is research laboratories, which typically require floor to floor heights in excess of 14 feet to accommodate needed mechanical equipment and ventilation. Under current zoning, if 14 foot floor to floor height is designed for a biotech use, the development may not be able to achieve the same number of floors as, for example, an office building. This often results in a competitive disadvantage for buildings containing a biotech use when compared with buildings employing standard dimensions for office or other commercial uses.

Proposal: Allow up to 10 to 20 feet of additional height for biotech development, depending on the zone.

When existing height limits of 65 feet, 75 feet and 85 feet were created, development anticipated by these height limits, assumed largely office, retail and residential use. These uses typically require floor to floor heights of 11 to 13 feet.

Without additional height, biotech development will be constructed with less than optimal configurations. Existing height limits would require that mechanical equipment be incorporated in a manner that compromises the function of the equipment or the research and development activities conducted within the building.

The additional height proposed to be allowed would apply only in zones with a height limit of 65, 75 or 85 feet (see the map at the end of the report, which shows the mapped height limits). In the Cascade Neighborhood, where the Seattle Cascade Mixed/Residential (SCM/R) zone applies, the height limit is 55 feet for non-residential development and 75 feet for residential and mixed use development (requirements for mixed use development can be met in the same structure or, in some cases, in different structures). The proposal amendments would continue to emphasize residential use in the SCM/R zone, but would allow additional height for biotech development which could then reach 85 feet.

The following chart shows the number of floors possible under existing and proposed height limits, using the typical floor to floor heights for biotech and other uses:

Existing Height Limits	Use	Current Number of Floors x Floor to Floor Height*	Proposed Additional Height	Proposed Maximum Height Possible	Proposed Number of Floors x Floor to Floor Height
65'	Office, retail, residential	6 floors x 11' 5 floors x 13'	N.A.	65'	--
	Biotech	4 floors x 14' 4 floors x 16'	20 feet	85'	6 floors x 14' 5 floors x 16'
75'	Office, retail, residential	6 floors x 11' 5 floors x 13'	N.A.	75'	--
	Biotech	4 floors x 14' 4 floors x 16'	10 feet	85'	6 floors x 14' 5 floors x 16'
85'	Office, retail, residential	7 floors x 11' 6 floors x 13'	N.A.	85'	--
	Biotech	6 floors x 14' 5 floors x 16'	20 feet	105'	7 floors x 14' 6 floors x 16'

* These floor to floor heights include some “interstitial” space that contains utilities like plumbing and ventilation. Some or all floors may be slightly taller or shorter than the number reported.

Taller buildings will result from adoption of the proposal. The neighborhood’s topography, sloping down from its perimeters toward the center of the neighborhood, and toward Lake Union, will help to lessen the impact of taller buildings on nearby development, within and surrounding the neighborhood. Further, approval of additional height would be conditioned upon meeting criteria intended to ensure that the height is necessary to accommodate a biotech use.

These conditions require that:

- at least two floors in the building must have a minimum floor to floor height of 14’;
- the additional height is needed to accommodate mechanical equipment; and
- no more floors would be constructed than could be built with 11’ floor to floor heights under the mapped height limit.

These conditions are expected to be sufficient to ensure that the provisions for additional height are limited to biotech and research and development use. Costs associated with developing such space are very high. This is due to construction type (concrete and steel), specialized mechanical equipment, and fire and life safety design features required by various codes.

Height Measurement

Generally, the current code height measurement technique requires that height be measured at each exterior wall, from existing or finished grade, whichever is lower, to a plane essentially parallel to the existing or finished grade. For example, in a NC3/65

zone the allowable building envelope for a structure would be a three dimensional representation of the ground, raised to an elevation of 65 feet

See Attachment A for Exhibits A through G at the end of this report.

These figures demonstrate the effects that unusual topographies have on allowable building envelopes. Exhibit A shows the effects of a large depression located in the middle of a development site; Exhibit B shows the effects that a similar depression might have if it were straddling a façade of a structure; and Exhibit C shows the effects of meandering topographic lines. In situations such as these, application of the current height measurement technique often results in unintended consequences and the loss of development potential on the site for no credible reason. This can be most easily understood by comparing the building envelopes shown in Exhibits A, B and C with Exhibit G (at the end of this report), which shows the allowable building envelope for an NC3 65 zone when a lot is predominantly flat.

Proposal: Apply a height measurement technique similar to that used downtown, using the street frontage of the property to determine building height, for sites in South Lake Union.

DCLU is proposing to amend the height measurement technique for the South Lake Union Urban Village. Exhibits D, E and F (at the end of this report) show the allowable building envelopes that would result if the new technique were adopted. The proposed technique straightens meandering contour lines and disregards depressions and mounds that undermine reasonable expectations for development. The resulting development from application of this measurement technique will not be significantly taller nor will it contain more floors than development using the current technique. In most cases, the result will be complete floors where only partial floors could be built before. Therefore, the new height measurement technique will help achieve development capacity already theoretically allowed by the current zoning.

FAR (Floor Area Ratio)

Allowed development density, achievable through FAR, or Floor Area Ratio, is a ratio that limits floor area as a proportion of lot area. Downtown, 3.5% of mechanical equipment is exempt from FAR calculations, but there is no such exemption from FAR calculations for mechanical equipment in Commercial and Industrial Zones where FAR limits apply. The exemption used Downtown was generally established for office and hotel uses in highrise development. Based on discussion with biotech industry representatives and their building designers, specialized mechanical equipment requirements for research laboratories consume anywhere from 8% to 15% of overall floor area.

Proposal: Exempt from the FAR calculations up to 15 percent of overall floor area for mechanical equipment for biotech development.

Frequently, equipment, delivery systems, electrical wiring and ventilation systems are contained within a structure, in addition to being placed on a roof. Current requirements for calculating floor area subject to FAR limits in the zones in South Lake Union do not recognize that an appreciable portion of the building interior is not usable floor area. One of the main purposes of FAR is to limit usable floor area in order to address the impacts associated with the density of development. Thus, exempting a reasonable amount of area dedicated to mechanical equipment, 15%, serves the intent of the FAR limits while preventing a situation in which development with special mechanical needs is unnecessarily penalized in terms of useable floor area.

During plan review, floor area containing mechanical equipment, up to a maximum of 15%, is proposed to be exempted from floor area calculations. Development standards governing the bulk and scale of development will remain as they are today, thereby ensuring that excluding floor area from FAR calculation will not result in larger or bulkier buildings. DCLU would maintain the authority to mitigate bulk and scale impacts through the environmental and design review processes, where applicable (e.g. design review is not applicable in the IC zone). In addition, the proposal only applies to development in zones where FAR is limited (C and NC zones with height limits of 85 feet or higher). Thus, this proposed amendment would apply to a relatively small number of projects.

Roof Top Enclosures and Screening

Higher mechanical system demands for biotech development results in the need to cover more of the area of the roof with equipment than current regulations allow. Biotech development equipment needs can be three times that of a typical office building. The current roof top coverage allowed for penthouses and equipment that are located above the height limit is 20%, with an increase to 25% if equipment is screened.

Proposal: Increase the allowable roof top coverage area if equipment is screened, and provide flexibility in the code so that screening and equipment setbacks may be adjusted depending upon factors such as the height of the building.

Rooftop equipment of varying sizes can be observed in Seattle as development has occurred according to different regulations allowing varying amounts of rooftop coverage. In addition, buildings, such as the Rosen Building in the South Lake Union area, are below the maximum height limit and limits on how much of the roof area can be covered by mechanical equipment do not apply. Therefore, allowing more coverage would not cause new development to be out of character with its surroundings. Therefore, the most important issues with respect to rooftop mechanical equipment are aesthetic: 1) creating a break in the building envelop so that the equipment penthouse does not add to the appearance of bulk of the total structure; and 2) design integration of the penthouse with the building.

The proposal addresses these issues by: limiting roof coverage to 65%; retaining the 15' maximum height limit for rooftop equipment; requiring ten foot setbacks from the edges of the roof; and requiring that the equipment be screened. In addition, for development subject to Design Review, design guidelines address integration of the various features of a building (such as rooftop equipment) along with other relevant design issues.

Parking

In establishing the minimum amount of parking that must be provided for a particular use, several factors are considered or weighed and balanced, including:

- demand for parking;
- on-street parking use and congestion;
- long term vs. short term characteristics of the parking demand;
- transportation goals and policies;
- the cost of providing parking (structured parking costs between \$20,000 and \$30,000 per space)

Perhaps the most significant factor in establishing a parking requirement is the nature of the use: when employees and customers/clients are in the building, length of stay and the number of people at any one time that occupy a building. The intent of parking requirements is to help ensure that new development provides sufficient parking to serve its needs without causing significant spill-over parking onto nearby streets. This is balanced against other transportation and land use goals and policies, such as preserving or creating an active pedestrian environment or limiting single occupant vehicle use.

Laboratory research and other activities typically associated with biotech development are currently required to provide parking in excess of the demand generated by biotech businesses. Biotech industry representatives report that the code requires more parking than is used by their employees. This trend is supported by data provided by a national source for parking demand research and by DCLU's examination of the nature of biotech development.

The parking requirement for research and development is one parking space for every 1,000 square feet of building area. This mirrors the requirement for administrative office use. When current requirements were established it was believed that research and development and administrative office uses would function in similar ways. Lowering the parking requirement for biotech development is supported by data from the Institute of Transportation Engineers Parking Generation manual (2nd edition), which reports a peak parking demand for research use that is roughly 63% of the peak parking demand rate for office.

In addition, biotech representatives report that: biotech companies and institutions generally have half the number of employees per square foot of building area than office use, due to the presence of substantial mechanical and laboratory equipment; and employees work in shifts, resulting in fewer people on the site at any one time. In recognition of these factors, DCLU proposes to reduce the current parking requirement

by 30% to one parking space for every 1,500 square feet of research and development laboratory use in South Lake Union.

Proposal:

Revise the amount of parking required for research and development laboratory use in South Lake Union from the current requirement of 1 space for each 1,000 square feet of floor area to one space for every 1,500 square feet.

Loading

Loading berth requirements exceed demand for these facilities as well. The Land Use Code currently requires that loading space be provided according to category of use. The code does not recognize the centralized loading facilities of campus style development such as the Fred Hutchinson Cancer Research Center. The proposed amendments would provide the Director of DCLU the discretion to permit a centralized loading facility, if the permit applicant can demonstrate that the facility can adequately and effectively serve the use. Criteria are proposed that provide guidance for the Director's decision. The criteria focus on ensuring that loading activities do not disrupt pedestrian and vehicle traffic on nearby rights-of-way. In addition, the Director would consult with the Director of the Department of Transportation in making the decision.

Proposal:

Revise the amount of loading berths required to recognize centralized facilities.

Land Use Code Definition of "Research and Development Laboratory" Use

The definition of research and development laboratory was intended to recognize the emerging business sector of research and development laboratories related to biotech and computer software endeavors. The Industrial Commercial (IC) zone was specifically created and applied in such areas as South Lake Union to attract research and development use, in particular, biotechnology businesses. IC allows for a wide range of uses from manufacturing to laboratory research to administrative office that typically make up such business endeavors.

The current Land Use Code definition of research and development does not address the nonprofit entities that are engaged in research and development activities. Currently only private sector, for-profit commercial entities are recognized. Further, the existing definition does not recognize that research and development use does not always lead to the production of tangible goods, such as pharmaceuticals. Intellectual property and advancements are often the products of biotech related research and development uses. The proposed changes to the definition are intended to further refine and clarify the definition of "Research and Development Laboratory."

This amendment is proposed to apply citywide. Though the proposal is not a change in how uses are regulated, there may be some concern with the change since the definition

would apply to non-biotech research and development uses as well, including computer software or internet related businesses. However, while some aspects of computer related businesses may be classified as research and development, in most instances the use is categorized as administrative office. Generally, classification of a use is determined by the configuration of space in a structure, the nature of the business and its services or products, and standard or similar definitions of like uses. As the biotech sector has evolved, a better understanding of its needs and characteristics has emerged, which not only allows the development of a more precise definition, and an opportunity to appropriately classify the use.

RECOMMENDATION

The attached ordinance is proposed to further the South Lake Union Neighborhood vision as a hub for the biotechnology industry. Further, the proposed Land Use Code amendments are consistent with the Comprehensive Plan's Land Use and Economic Development Policies encouraging new employment opportunities, a diverse employment base within the city, and active mixed use neighborhoods.

DCLU recommends approval of the proposed ordinance, which in summary achieves the following:

1. Maximum Building Height

- Allow up to 10 to 20 feet of additional height for biotech development in the South Lake Union Urban Village.
- Amend the height measurement technique for sites in the South Lake Union Urban Village.

2. FAR (Floor Area Ratio)

Allow up to a 15% exemption in FAR for mechanical equipment for biotech development in the South Lake Union Urban Village.

3. Roof Top Enclosures and Screening

Increase the allowable roof top coverage area to 65% if equipment is screened, and provide flexibility pursuant to Design Review so that screening and equipment setbacks may be adjusted, within the South Lake Union Urban Village.

4. Parking

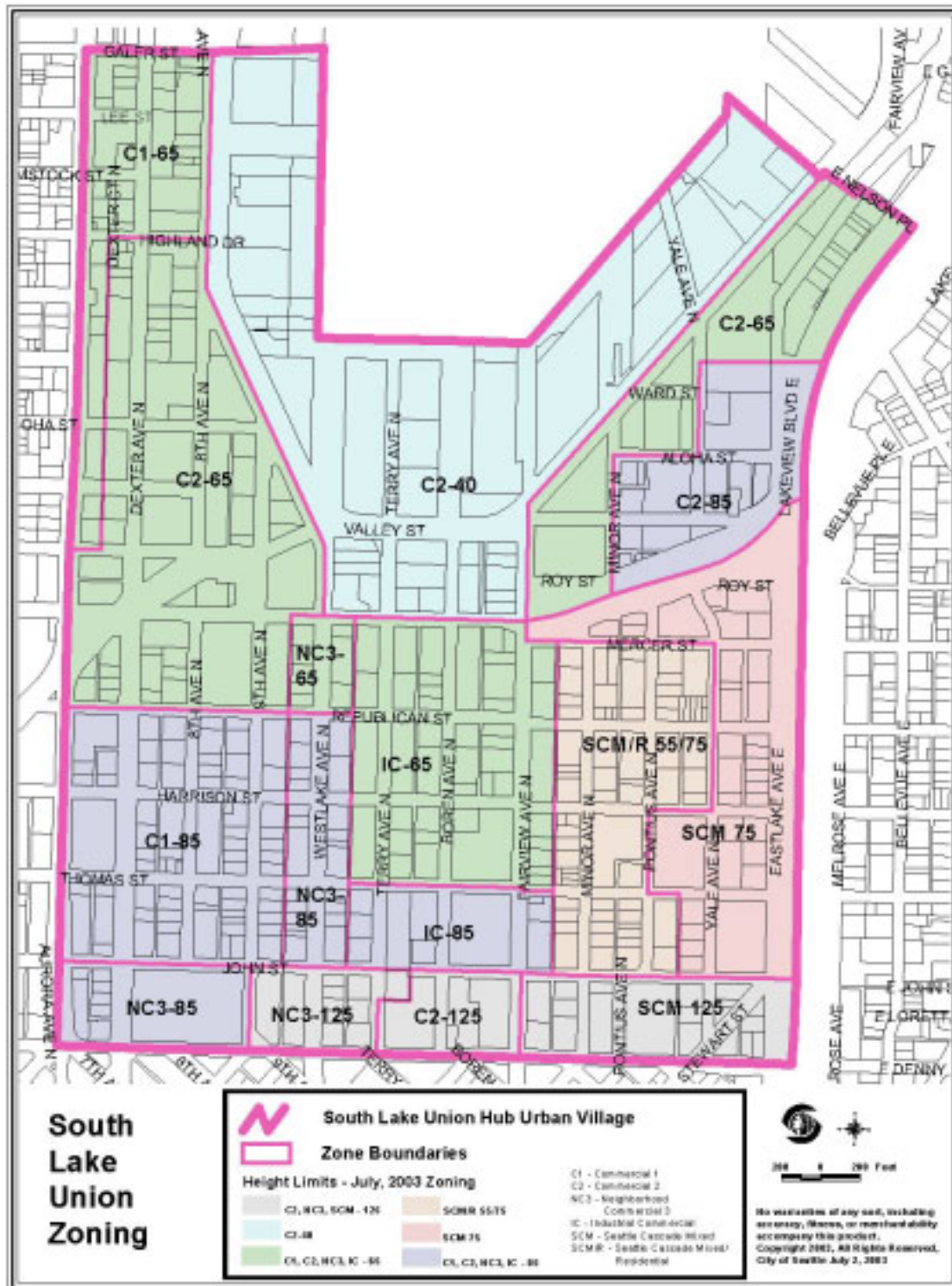
Revise the amount of parking required for research and development laboratory from 1 space for each 1,000 square feet to 1 space for each 1,500 square feet of floor area within the South Lake Union Urban Village.

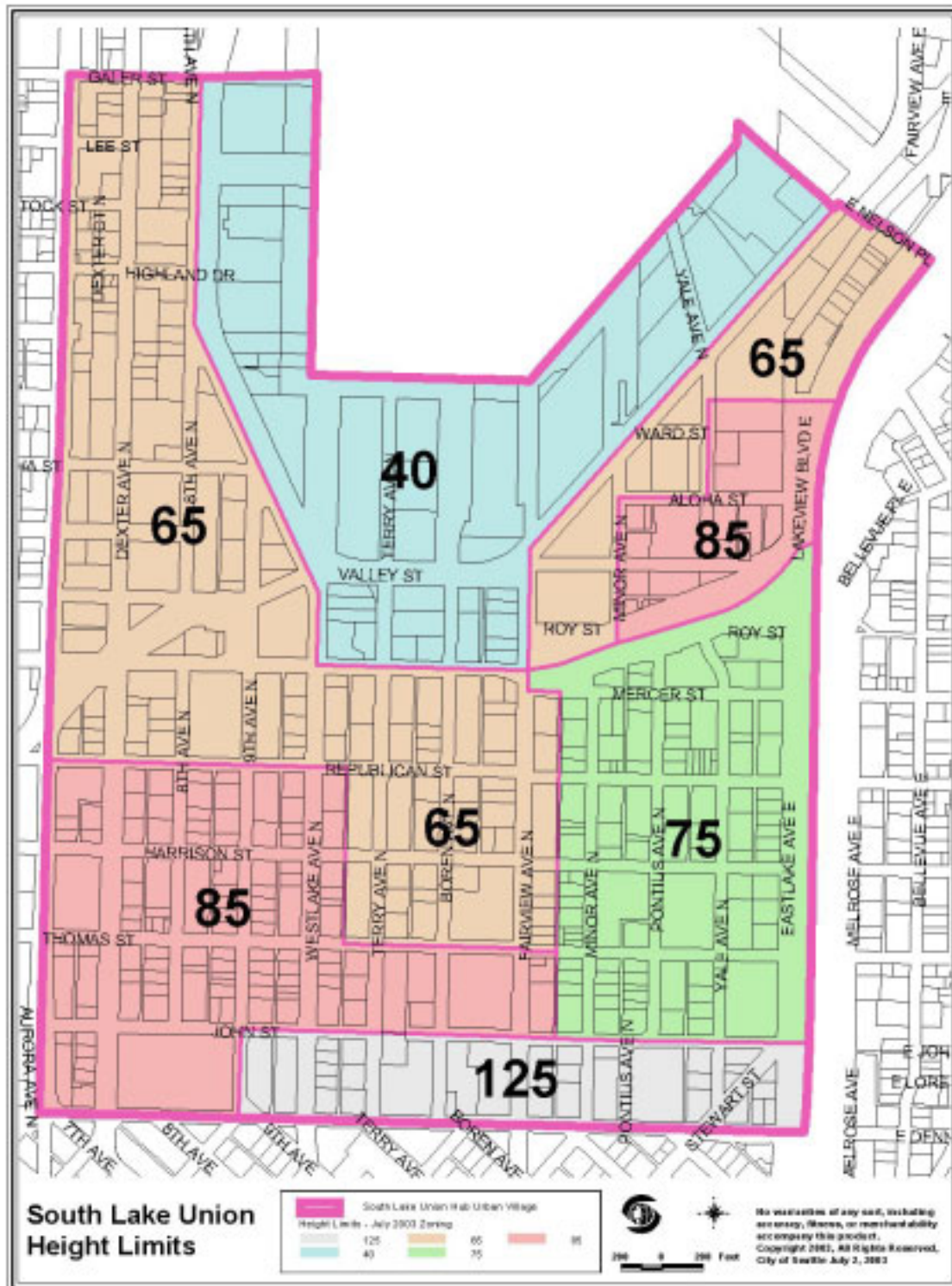
5. Land Use Code Definitions

Clarify the definition of "research and development laboratory" for application citywide.

DCLU, in making recommendations, has considered recommendations or comments from any affected departments, other government agencies or citizens. Environmental

review was conducted and a Declaration of Non-significance (no environmental impact statement required) was issued. These materials are available upon request.





Attachment A: Illustrations of the Height Measurement Technique, Exhibits A through G.

Attachment A to the Director's Report Illustrations of the Height Measurement Technique

Exhibits A, B and C illustrate the application of the current measurement technique (used in commercial and industrial zones) to different sites.

Generally, the current code height measurement technique requires that height be measured at each exterior wall, from existing or finished grade, whichever is lower, to a plane essentially parallel to the existing or finished grade. For example, in a NC3/65 zone the allowable building envelope for a structure would be a three dimensional representation of the ground, raised to an elevation of 65 feet.

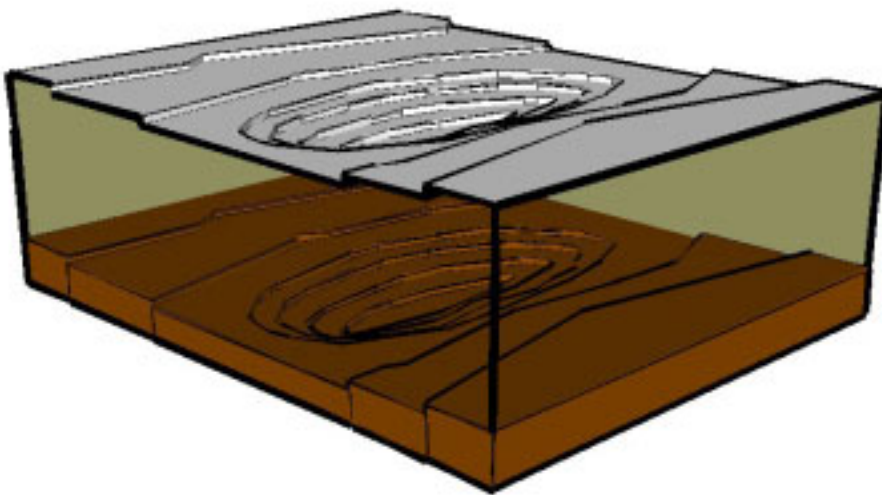


Exhibit A – an example of a site with a depression (topographic low-point) in the center of the site. The volume represents the allowable building envelope created by the measurement technique currently applied in South Lake Union.

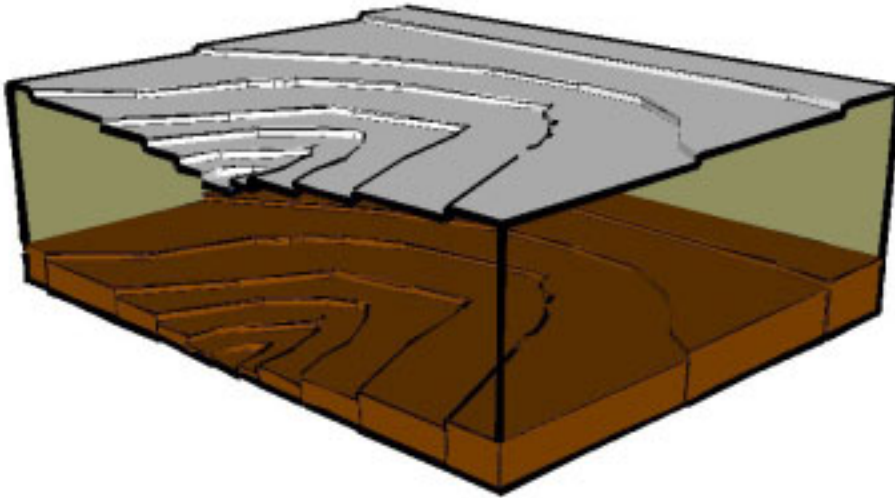


Exhibit B – an example of a site with a depression (topographic low-point) along one side of the site. The volume represents the allowable building envelope created by the measurement technique currently applied in South Lake Union.

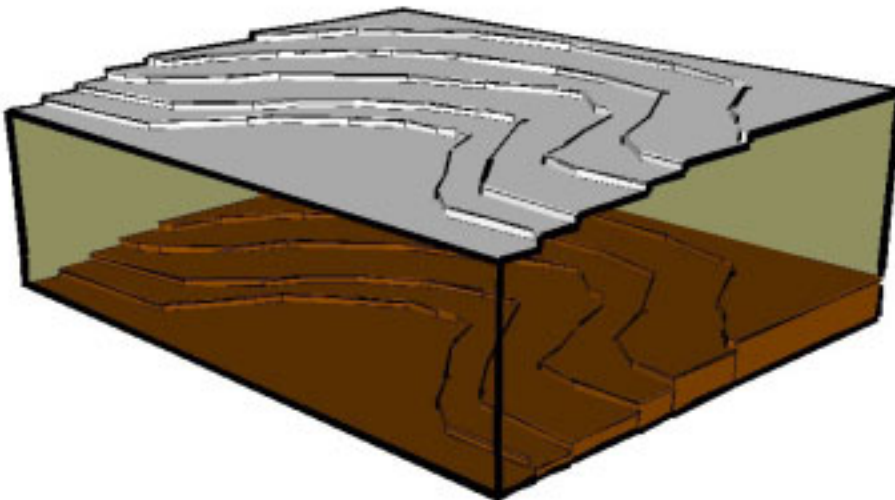


Exhibit C – an example of an irregular, sloping site. The volume represents the allowable building envelope created by the measurement technique currently applied in South Lake Union.

Exhibits D, E and F illustrate the application of the proposed measurement technique (to be used in commercial and industrial zones in South Lake Union) to different sites.

The proposed technique straightens meandering contour lines and disregards depressions and mounds that undermine reasonable expectations for development. The resulting development from application of this measurement technique will not be significantly taller nor will it contain more floors than development using the current technique. In most cases, the result will be complete floors where only partial floors could be built before.

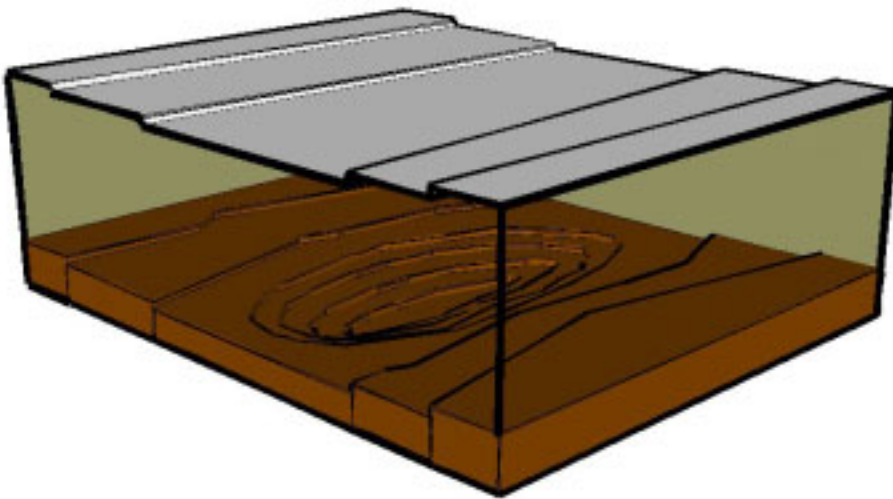


Exhibit D – an example of a site with a depression (topographic low-point) in the center of the site. The volume represents the allowable building envelope created by the proposed measurement technique for South Lake Union.

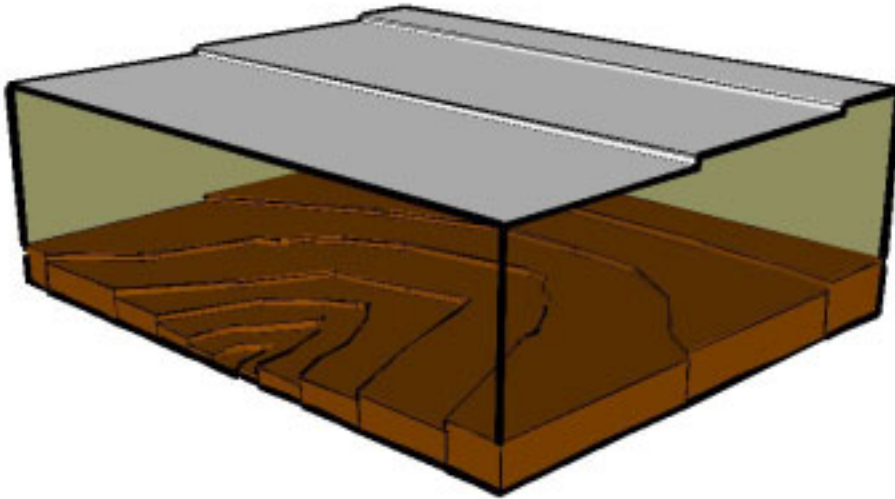


Exhibit E – an example of a site with a depression (topographic low-point) along one side of the site. The volume represents the allowable building envelope created by the proposed measurement technique for South Lake Union.

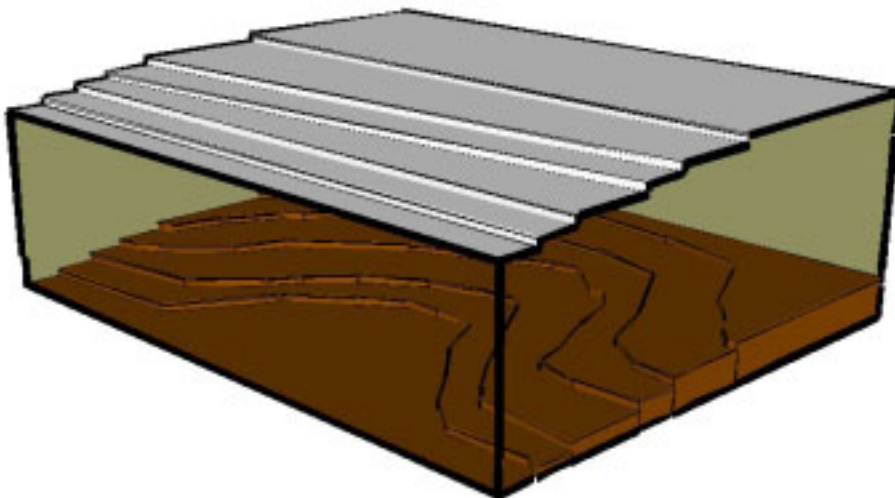


Exhibit F – an example of an irregular, sloping site. The volume represents the allowable building envelope created by the proposed measurement technique for South Lake Union.

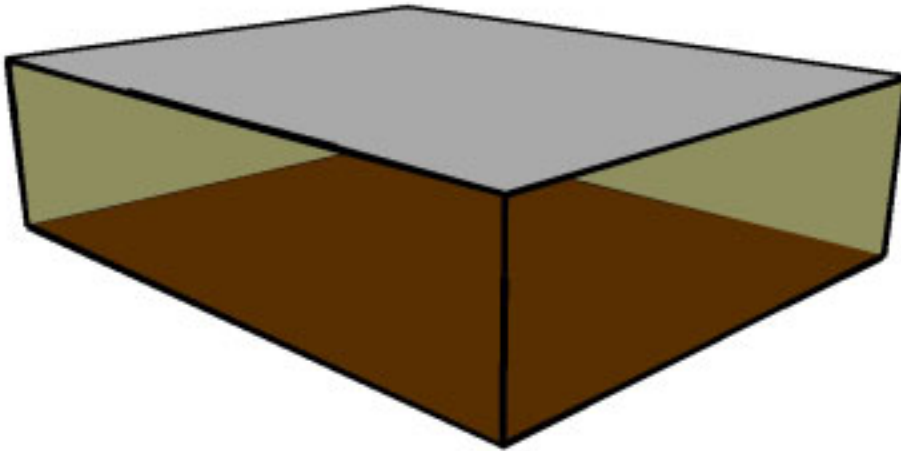


Exhibit G – an example of the allowable building envelope for an NC3-65' zone when the site is predominantly flat.